In most cases the tendon reflexes have not returned after they have been once lost. In some of these there has been a general septic infection, with visible organic changes in the muscles and nerves of the lower extremities or in the lumbar cord; in other cases, rapid death has prevented the formation of these visible alterations. Where the loss of the tendon reflexes after the formation of a transverse lesion has been gradual, the cause is to be sought in secondary morbid processes; as extension of a tubercular meningitis; neuritis due to alcohol, toxæmia or cachexia; or general septicæmia, which cause degeneration of nerves and muscles.

Dr. Bischoff acknowledges that his explanation is entirely hypothetical. SPILLER.

FLACCID PARAPLEGIA WITH ANÆSTHESIA, COEXISTING WITH EXAGGERATED KNEE-JERK, FOOT CLONUS AND SPASM OF THE BLADDER AND RECTUM.

The rarity of the above syndrome induced Dr. Journier (Lyon Med., June 28, 1896) to publish his observations and the resulting conclusions: The patient, thirty-four years old, had no positive previous history. His present trouble began three months ago with pains in the lumbar regions, then radiating pains around the abdomen, then progressive paraplegia set in, which has developed so rapidly, and to such an extent, within the last two months, that the patient is now powerless. There were concurrent vesico-rectal troubles. The examination revealed further: Pains on pressure over the second and third lumbar vertebræ; flaccid paraplegia with absolute loss of power of both legs; complete anæsthesia in this region with a zone of hyperæsthesia above the glutei; slight œdema of the feet; Laseque's signs of both sciatic nerves; exaggerated knee-jerks, and well marked clonus of the feet; exaggerated cutaneous reflexes, but less marked; desire to micturate frequently, but unable to satisfy it without passing catheter, which reveals spasms of the sphincter; spasms of the sphincter ani, and, in order to help defecation, the patient is obliged to introduce a finger into the anus. The diagnosis of Pott's disease, with compression of the lower lumbar cord and terminal cone, was made by Professor Lepine. The author remarks that the tendon reflexes are considered in general to depend entirely upon the condition of muscular tone, but the present observation goes to prove their independence. Accepting the theory of the tendon reflex centres as being in the spinal cord, the phenomena might be explained as follows: The compression of the spinal cord by the diseased vertebræ did not produce very extensive lesions in its substance, but these lesions might easily be of sufficient intensity to be annihilatory, inhibitory, or destructive at a certain point—for instance, in the upper portions of the conus terminalis, and adjacent cord—and only sufficient to be stimulating higher up, or perhaps lower down. The centre for the patella tendon reflex is usually localized by Starr in the extremity of the conus terminalis. These are all distinct centres, although they are connected with the spinal centres for movements of the lower extremity, the bladder and rectum. If, notwithstanding the complete anæsthesia and paralysis, percussion of the patella tendons causes the foot to be thrown forward forcibly, it is because the crural nerve contains special sensory fibres These fibres transmit impulses through a fascicle of collateral fibres, described by Ramon y Cajal, to be a special group of cells in the anterior horns, which are therefore motor reflex cells. The same interpretation might be applied to other reflex movements, as for instance, the foot clonus. The flaccidity and the exaggerated reflex motility of the muscles could not be accounted for by the hypothesis of a transverse myelitis with compression of the pyramidal tracts. If muscular tone, ordinary and reflex movements, were controlled by the same anterior spinal neuron, one would expect similar disturbances of these three functions. But the foregoing authentic example of disassociation, the author thinks, should justify his advancing the theory of different motor neurons in the anterior horns, the ones controlling reflex movements, the others voluntary motility and muscular tone, both of which, however, are connected with each other by the pyramidal fascicle of the cerebral cortex. Therefore, the hypothesis of the existence of a peripheral neuron in a spinal ganglion, the function of which is transmission of peripheral impulses to a motor reflex neuron, would not seem unreasonable, and might help explain the symptoms of the pseudo-tabes of peripheral origin. MACALESTER.

PARAPLEGIA: GUNSHOT WOUND OF THE SPINAL CORD. Whittaker, Rausohoff and Kramer. International Medical Magazine, November, 1896.

Under the above title, Whittaker embraces the occasion offered by an interesting clinical case to speak at some length upon lesions of the spinal cord. The cited case offered many peculiar features, both in symptomalogy and treatment. A young married woman had five weeks previously accidentally shot herself through the abdomen. The pistol ball passed through the stomach and lodged in the vertebral column. Collapse and blood vomiting followed immediately, but no loss of consciousness occurred. The lower part of the body became instantly paralyzed. Sensation to touch and pain lost below the stomach line, bowels and bladder functionless. In a few days bed sores began to develop and great pain was felt in the upper part of the body. Status at time of admission: lower half of body markedly atrophic; paraplegia complete and absolute; all reflexes abolished; skin white and scaly; large, deep bed sores over the sacrum, trochanters, knees and ankles; cicatrix of the entering bullet in the median line, some inches below ensiform process. Diagnosis: Wound of spinal column with pressure on the cord. Treatment: Europhen paste on bed sores; catheterized; bowels flushed; placed on water-bed.

By means of X-rays the bullet was located in or near the eighth dorsal vertebra. Operation revealed its lodging-place there in the body of the vertebra. The cord was compressed by protruding bone at that point (eighth dorsal), and seemed considerably broken up.

After the operation the patient slowly rallied, but the bed sores persisted and the patient was placed in the water bath at 90° F. She was taken from the tank only for an hour a day and placed on a cot. Under this treatment improvement began and the bed sores commenced healing. Morphine reduced to four grains in the twenty-four hours. Whittaker's discussion of the case was aided by "Remarks on Surgery of the Spinal Column and Cord" (Rausohoff) and "Explanations on the Use of X-Rays in Diagnosis" (Kramer, who took the skiagraph). Taken altogether the subject was most interestingly treated. Rausohoff and Kramer warn not to make a too hopeful prognosis in spite of the successful operation. The remarks of the former, a noted surgeon, were especially noteworthy, as he maintains the lesion could readily have been located without the use of the X-rays. Whittaker, being intimately acquainted with the physiology and pathology of cord lesions, seems to take no very hopeful view of our efforts to rescue cases of cord lesions. Regeneration of the spinal tissue may perhaps be possible, but no sure signs are as yet known which would lead us to believe in such a possibility. The above article is of such importance and so clearly dealt with, that it should be read carefully in the original, notably on account of the prognostic conclusions. STERNE (Indianapolis).

POTT'S DISEASE WITH EARLY ANÆSTHESIA.

Chipault (La Médecine Moderne, Aug. 15, 1896) describes a case